CLAIMS

1. A yeast cell containing the *SRB1/PSA1* gene and the *PKC1* gene or functional derivatives thereof each operatively linked to a heterologous inducable promoter.

2. The yeast cell according to claim 1 wherein the yeast cell is a strain of *Saccharomyces cerevisiae*

3. The yeast cell according to claim 1 wherein the yeast cell is a strain of *Pichia pastoris*, *Hansenula polymorpha* or *Kluyveromyces lactis*.

4. The yeast cell according to ~~any one of~~ claims 1 ~~-3~~ wherein at least one of the genes or functional derivatives thereof is operatively linked to a methionine regulated promoter.

5. The yeast cell according to claim 4 wherein the methionine regulated promoter is p*MET3*.

6. The yeast cell according to claim 5 wherein the *PKC1* gene or functional derivative thereof operatively linked to an inducable promoter is derived from a recombinant vector selected from pRS316-p*MET3-PKC1*, pRS316-F_1F_2-p*MET3-PKC1* or pRS316-F_1F_2-TRP1-p*MET3-PKC1*.

7. The yeast cell according to claim 5 wherein the *SRB1/PSA1* gene or functional derivatives thereof operatively linked to an inducable promoter is derived from the recombinant vector SRB1.9e.

8. The yeast cell according to claim 7 wherein the *PKC1* gene or functional derivatives thereof operatively linked to an inducable promoter is derived from a

recombinant vector selected from pRS316-p*MET3-PKC1*, pRS316-F_1F_2-p*MET3-PKC1* or pRS316-F_1F_2-TRP1-p*MET3-PKC1*.

9. A method of regulating yeast cell lysis comprising:

(i) growing yeast cells containing the *SRB1/PSA1* gene and the *PKC1* gene or functional derivatives thereof each operatively linked to an inducable promoter in a growth medium which activates the inducable promoter such that *SRB1/PSA1* and *PKC1* are expressed from said cells; and

(ii) when lysis is required, growing the cells in a modified growth medium which represses *SRB1/PSA1* and *PKC1* expression such that cell lysis is induced.

10. The method according to claim 9 wherein the yeast cells are cells according to any one of claims 1 - 8.

11. The method according to claim 9 ~~or 10~~ wherein the inducable promoter is *pMET*. the growth medium is methionine-free and the modified growth medium contains methionine.

12. The method according to claim 11 wherein the modified medium contains from between 0.05mM and 20mM methionine.

13. A method of isolating protein from yeast cells comprising growing cells and inducing lysis according to ~~any one of~~ claims 9 ~~12~~ and separating the protein released from the lysed yeast cells from yeast cell debris / ghosts.

14. The method according to claim 13 for isolating recombinant proteins expressed from genetically engineered yeast cells.

15. A method of regulating yeast cell flocculation comprising:

(i) growing yeast cells containing the *PKC1* gene or a functional derivative thereof operatively linked to an inducable promoter in a growth medium which activates the inducable promoter such that *PKC1* is expressed; and

(ii) when flocculation is required, growing the cells in a modified growth medium which represses *PKC1* expression such that flocculation is induced.

16. The method according to claim 15 wherein the yeast cells are a strain of *Saccharomyces cerevisiae*

17. The method according to claim 15 wherein the yeast cells are a strain of *Pichia pastoris, Hansenula polymorpha* or *Kluyveromyces lactis.*

18. The method according to ~~any one of~~ claims 15 ~~to 17~~ wherein the *PKC1* gene or functional derivative thereof is operatively linked to a methionine regulated promoter.

19. The method according to claim 18 wherein the methionine regulated promoter is p*MET3*.

20. The method according to claim 19 wherein the yeast cells contain the *PKC1* gene or functional derivative thereof operatively linked to p*MET3* derived from a recombinant vector selected from pRS316-p*MET3-PKC1*, pRS316-F_1F_2-p*MET3-PKC1* or pRS316-F_1F_2-TRP1-p*MET3-PKC1*.

21. The method according to claim 20 wherein the yeast cells are ZO-126.

22. The method according to ~~any one of~~ claims 15 ~~to 20~~ wherein the yeast cells are ZO123 or ZO124 transformed with the *PKC1* gene or functional derivative thereof operatively linked to an inducable promoter.

23. The method according to ~~any one of~~ claims 15 ~~to 22~~ for increasing the sedimentation of yeast cells or cell ghosts / debris form a medium within which the yeast cells are grown.

24. A method of fermentation comprising growing yeast cells containing the *SRB1/PSA1* gene or functional derivative thereof operatively linked to a heterologous promoter in a growth medium in which *SRB1/PSA1* expression is regulated by the heterologous promoter whereby said cells flocculate.

25. The method according to claim 24 wherein the yeast cell is a strain of *Saccharomyces cerevisiae*

26. The method according to claim 24 wherein the yeast cell is a strain of *Pichia pastoris, Hansenula polymorpha* or *Kluyveromyces lactis.*

27. The method according to ~~any one of~~ claims 24 ~~to 26~~ wherein the *SRB1/PSA1* gene or functional derivative thereof is operatively linked to a methionine regulated promoter.

28. The method according to claim 27 wherein the methionine regulated promoter is p*MET3.*

29. The method according to claim 28 wherein the *SRB1/PSA1* gene or functional derivatives thereof operatively linked to an inducable promoter is derived from the recombinant vector SRB1.9e.

30. The method according to claim 29 wherein the yeast cells are ZO-125.

31. The method according to claim 29 wherein the yeast cells are FY23*SRB1*^{MET3}.

32 A method of fermentation comprising growing yeast cells containing the *SRB1/PSA1* and *PKC1* gene or functional derivatives thereof operatively linked to a heterologous promoter in a growth medium in which *SRB1/PSA1* and *PKC1* expression is regulated by the heterologous promoter whereby said cells flocculate.

33. The method according to claim 32 wherein the cells are cells according to any one of claims 1 - 8.

34. The method according to claim 32 wherein the cells contain the *PKC1* gene or a functional derivative thereof operatively linked to a heterologous inducable promoter and the *SRB1/PSA1* gene or a functional derivative thereof operatively linked to a heterologous promoter.

35. A yeast cell containing the *PKC1* gene or functional derivatives thereof operatively linked to a heterologous inducable promoter selected from the group consisting of:

(i) ZO124 transformed with pRS316-p*MET3-PKC1*, pRS316-F_1F_2-p*MET3-PKC1* or pRS316-F_1F_2-TRP1-p*MET3-PKC1*;

(ii) ZO123 transformed with pRS316-p*MET3-PKC1* or p*MET3-PKC1* containing fragments derived from pRS316-F_1F_2-p*MET3-PKC1* or pRS316-F_1F_2-TRP1-p*MET3-PKC1*; and

(iii) yeast strain ZO-126.

36. A yeast cell containing the *SRB1/PSA1* gene or functional derivatives thereof operatively linked to a heterologous promoter.

37. A yeast cell containing the *PKC1* gene or a functional derivative thereof operatively linked to a heterologous inducable promoter and the *SRB1/PSA1* gene or a functional derivative thereof operatively linked to a heterologous promoter.

38. A yeast cell according to ~~any one of~~ claims 35 or 37 wherein the promoter or promoters is/are *pMET3*.